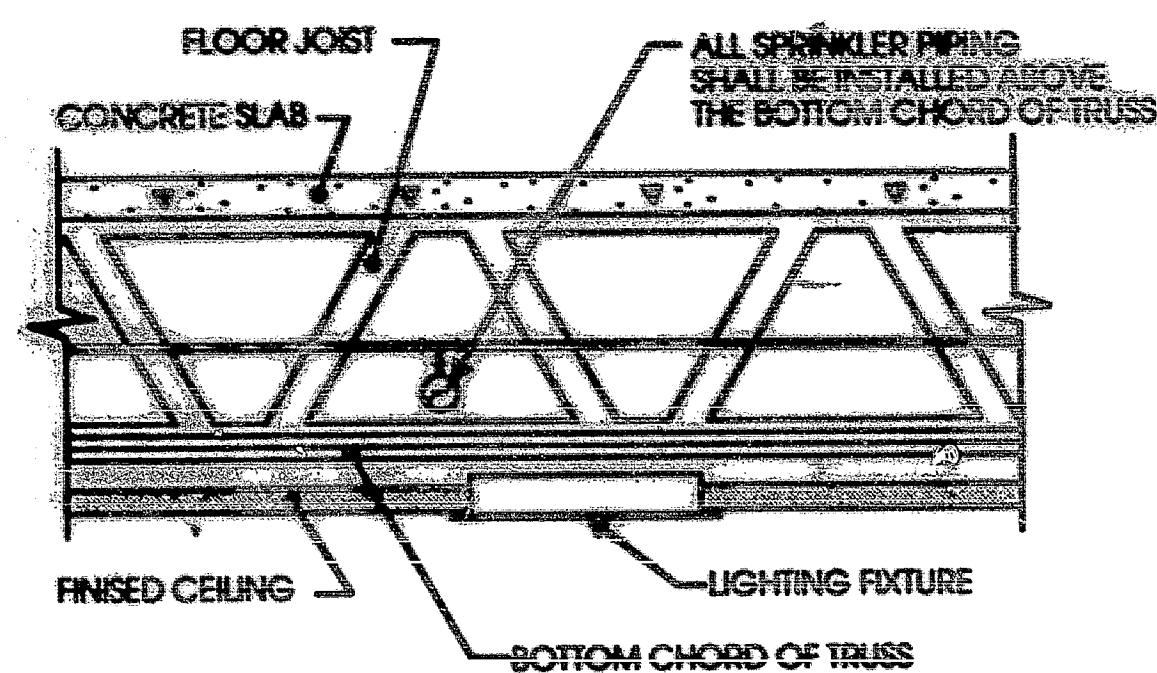


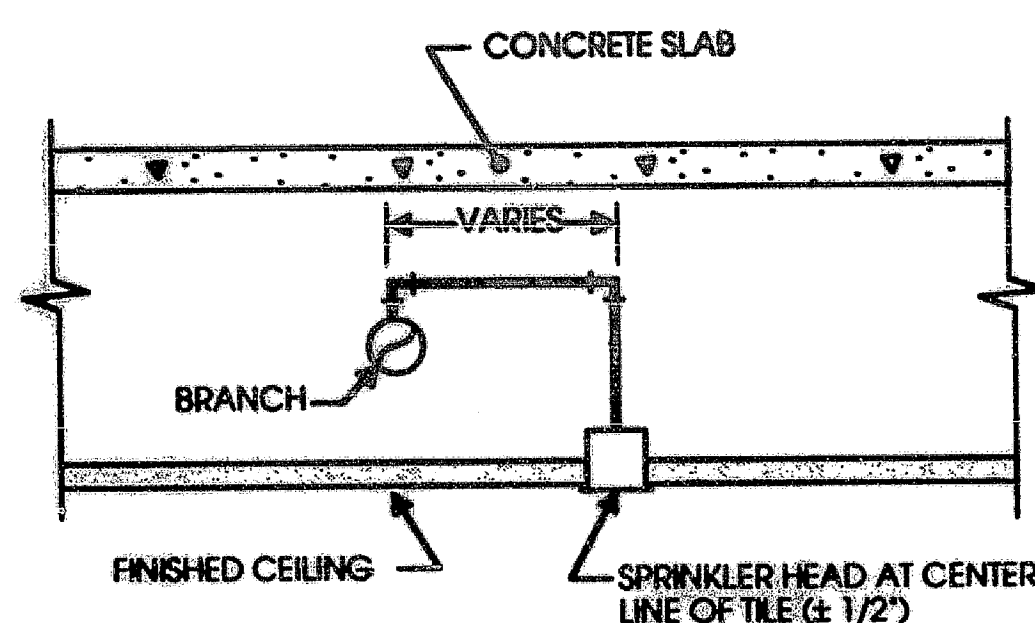
# **SPRINKLER SPECIFICATIONS**

1. Shutdown of existing system: At the time that such closing or opening of valves and shutdown becomes necessary, the Contractor shall notify the WFC Construction Division (at least 48 hours in advance) who will make the necessary arrangements. The Contractor shall keep the shutdown time to a minimum and drainage shall be to a properly connected receptacle without causing damage to other work and property.
2. Heads: Sprinkler Heads shall be Reliable Automatic Sprinkler Co. concealed type Model #64" 165 degree F rating, 1/2" orifice or approved equal. Polished chrome.
3. Pipe and Fittings: Schedule 40, standard weight, black steel pipe, ASTM A53-78/79. Fittings shall be cast iron, 150 lbs. class threaded.
4. All piping parallel to the exterior wall and within 15 feet shall be insulated.
5. Pipes and fittings shall be insulated where required by the contract drawings with one inch (1") thick heavy density fiberglass pipe covering with factory applied self-sealing tape (AST), self-sealing tape and butt strips bonded with aluminum straps (2" on centers), and pre-molded fiberglass for thermal insulation shall be similar in all respects to that manufactured by Owens Corning Fiberglas.
6. Pipes shall be installed to drain back to flow control valve. All main lines shall be above bottom chord of truss. Branch lines shall run through bridging trusses.
7. Piping: Before and after connections and sprinkler heads are installed, all piping shall be thoroughly blown out, soaked out, and washed out at least twice in a manner as directed by the Engineer to remove all accumulation of dirt, chips, or other deleterious material. Make all temporary connections and turn off appliances required for the purpose of cleaning at no extra expense to the Authority.
8. Pipe passing through walls shall have a trim opening cut no greater than necessary for the installation of a sleeve secured therein. Sleeves shall be made of Schedule 40 galvanized steel pipe for floor slabs and 20 gauge sheet metal for framed partitions. Sleeves shall be 1/2" in diameter larger than the diameter of the pipe or required insulation passing through, and sufficient length to be flush with the finished wall surface. Annular space between piping and sleeves or core drilled floor openings shall be packed with mineral wool and sealed to retain the fire integrity of the wall and floor with a non-hardening compound similar and equal to Duroseal as manufactured by J. M. Clipper Co.
9. Hangers: Install variable clevis type hangers supported from the existing building steel frame. Drilling/anchoring systems will be permitted. Drilling only when approved by the Engineer. Use HMM HDU anchors.  

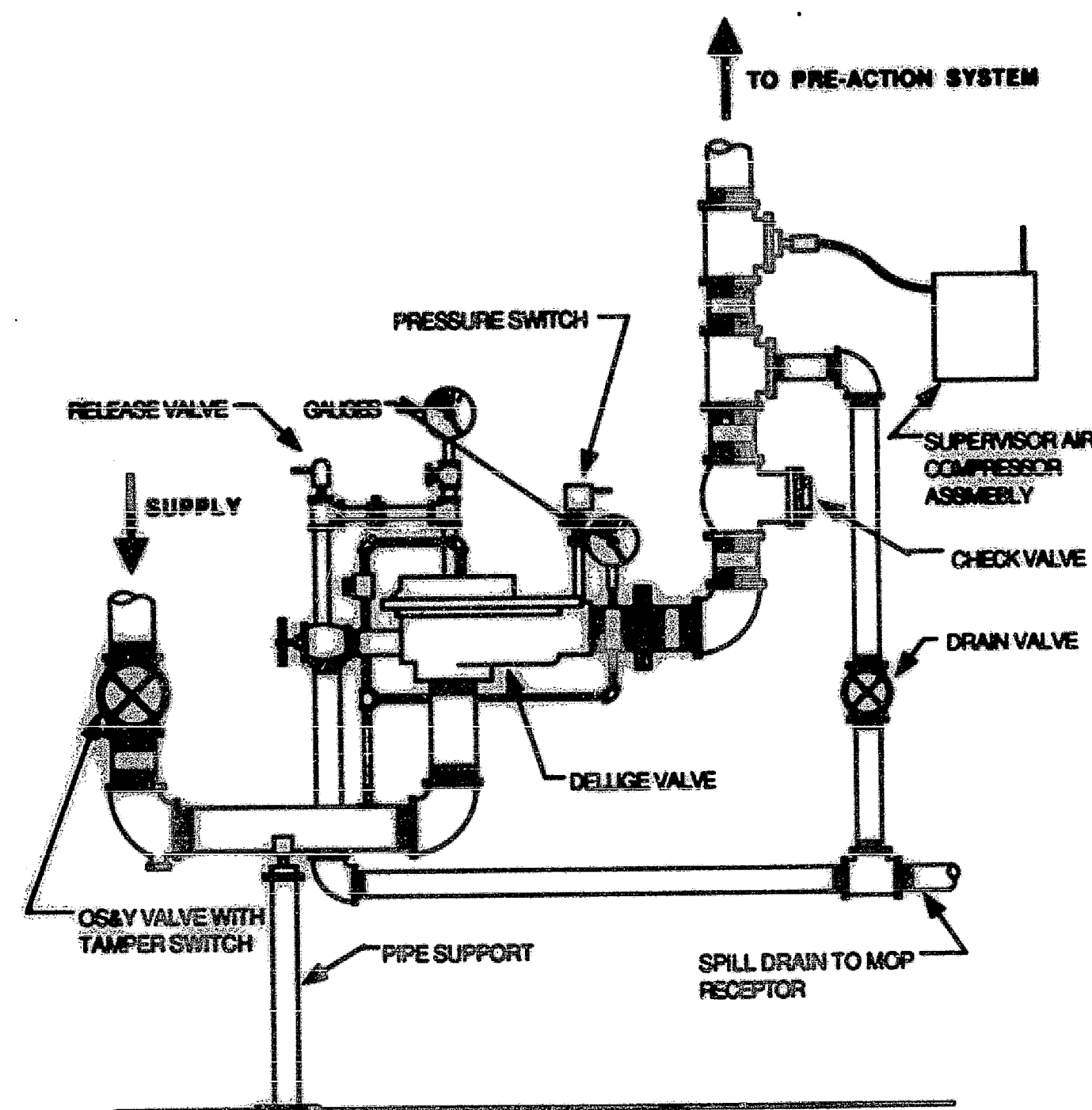
Pipe Size	Max. Hanger Spacing	Min. Rod Size
1-1/4" to 2"	8'-0" O.C.	3/8"
2-1/2" to 3"	10'-0" O.C.	3/8"
	12'-0" O.C.	1/2"
10. Valves: Gate Valve-OS & Y - Jenkins Bros. Fig. #825-1 flanged ends 175 lbs. W.W.P. Check Valve - Jenkins Bros. Fig. #629, flanged ends 175 lbs. W.W.P.
11. Pre-Action system shall Model #300 "Superior", as manufactured by the Reliable Automatic Sprinkler Co. System shall include Model "A" 2 1/2" deluge valve, Model "A" air compressor panel, alarms, Model "E" valve trim, battery cabinet, etc.
12. Tamper Switch: Acme Fire Alarm Co. Model #443, plug type, closed circuit, single contact, securely mounted on wall with cable of sufficient length looped through valve hand wheel.
13. All piping shall be installed above the bottom chord of the trusses.
14. Affix identification markers on all sprinkler piping. Markers shall be at 10' on centers. Markers shall be Brady Snap-On, Type 8, W.H. Brady Co. Sign Mark Division. Markers shall read "SPRINKLER PIPING" and "PRE-ACTION SPRINKLER PIPING".
15. Test: Entire installation shall be tested hydrostatically and remain tight with no loss of pressure for a period of no less than two (2) hours against a pressure of 200 p.s.i. Remaining portion of the floor system shall be isolated from the testing procedure.
16. Construction: Entire installation shall comply with all provisions of the NYC Building Code.
17. Disturbance of structural fireproofing shall be kept to a minimum and protection shall be observed for work above the ceiling.
18. Contractor shall submit detailed shop drawings to the Engineer for approval. No work shall commence until approval is obtained.
19. Provide hydraulic calculations for both Pre-Action and wet pipe systems. All friction losses shall be included in the calculations.



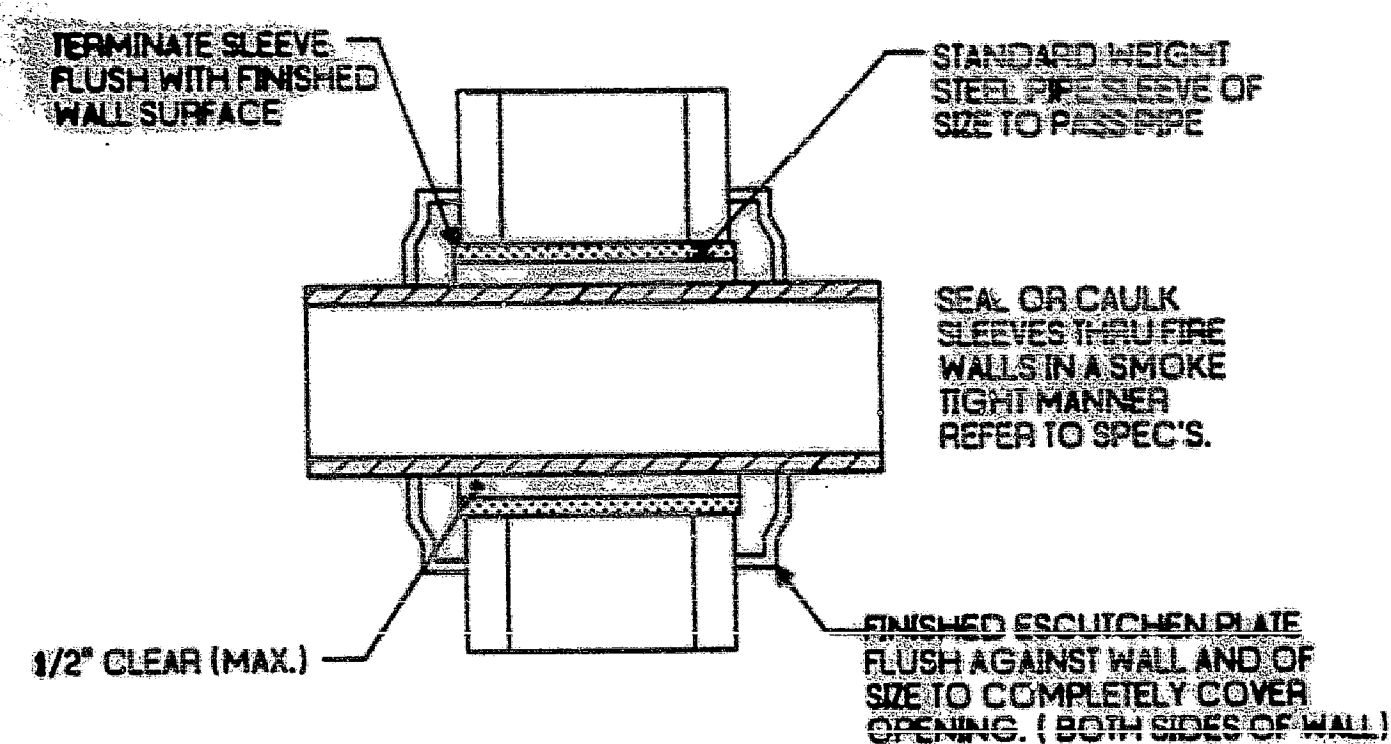
**DETAIL OF LOCATION OF PIPE IN SUSPENDED CEILING**  
NOT TO SCALE



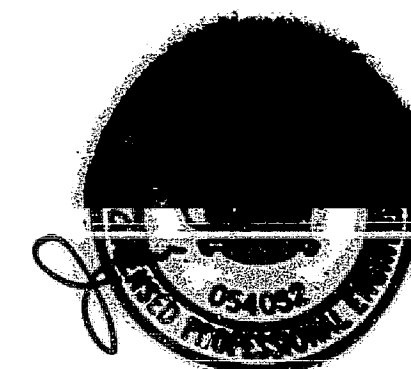
**DETAIL OF TYPICAL PIPING CONNECTION TO SPRINKLER HEAD**  
NOT TO SCALE



**PRE-ACTION VALVE ASSEMBLY DETAIL**  
NO SCALE



**TYPICAL PIPE SLEEVE DETAIL**  
NOT TO SCALE



W. No.	DESCRIPTION	DATE
100-104	Senior Fitzgerald Securities The World Trade Center Floor 104 New York, NY 10048	
<b>SPRINKLER SPECIFICATIONS &amp; DETAILS</b>		
John C. Westrick & Associates CONSULTING ENGINEERS 2110 Madison Avenue South Plainfield, NJ 07080 (908) 841-4170 Fax (908) 763-0884		
SCALE: NONE	DWN BY: PFE	CHKD BY: JCW
DATE: 6-23-92	JOB NO.	SP-1